

Glossary

Age class – An age class is an age grouping of trees according to an interval of years, usually 20. The trees are within 20 years of the same age, 1-20 years, 21-40 years, etc.

Allotment (range allotment) – An allotment is the area designated for grazing by a certain number of livestock for a given period.

Areas of consistent snow compaction – An area of consistent snow compaction is an area of land or water that during winter is generally covered with snow and gets enough human use that individual tracks are indistinguishable. In such places, compacted snow is evident most of the time, except immediately after (within 48 hours) snowfall. These can be areas or linear routes, and are generally found in near snowmobile or cross-country ski routes, in adjacent openings, parks and meadows, near ski huts or plowed roads, or in winter parking areas. Areas of consistent snow compaction will be determined based on the area or miles used in 1998, 1999 or 2000.

BA (Biological Assessment) – BA “refers to the information prepared by or under the direction of the Federal agency concerning listed and proposed species and designated and proposed critical habitat that may be present in the action area and the evaluation (of) potential effects of the action on such species and habitat.” (50 CFR Part 402.02)

BO (Biological Opinion) – BO “is the document that states the opinion of the (US Fish and Wildlife) Service as to whether or not the Federal action is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat.” (50 CFR Part 402.02)

Broad scale assessment – A broad scale assessment is a synthesis of current scientific knowledge, including a description of uncertainties and assumptions, to provide an understanding of past and present conditions and future trends, and a characterization of the ecological, social and economic components of an area. (LCAS)

Browse – Browse is the twigs, leaves and young shoots of trees and woody shrubs that animals eat or browse upon.

Canopy – The canopy is the part of any stand of trees represented by the crowns. It usually refers to the topmost layer.

Carr – A carr is a deciduous woodland or shrub land occurring on permanently wet, organic soil. (Helms 1998 and LCAS)

Cavity – A cavity is a hole in a tree often used by wildlife, usually birds, for nesting and roosting.

Climax – Climax is the culminating stage in plant succession for a given site. Climax vegetation is stable, self-maintaining and self-reproducing.

Coarse woody debris – Coarse woody debris is large pieces of dead woody material, such as dead tree trunks, limbs and root masses on the ground or in streams. (Helms 1998 and LCAS)

Commercial thinning – Commercial thinning is tree thinning where the cut trees are sold.

Commercial products, commercial timber sale – Commercial products are timber products that can be sold. A commercial timber sale is cutting and selling trees as timber products, bringing revenue to the government.

Condition class – Condition class is a description of how the land has departed from historic conditions based on the number of missed fire cycles (average fire-return intervals) and the amount of change in forest structure and species composition. (Schmidt et al. 2002)

Conifer – A conifer is a tree that produces cones, such as a pine, spruce or fir. Most conifers have needles instead of leaves.

Coniferous – A coniferous forest is one consisting primarily of conifer trees.

Connectivity (of habitats) – Connectivity is the linkage of similar but separated vegetation stands by patches, corridors or "stepping stones" of like vegetation. This term can also refer to the degree to which similar habitats are linked.

Cover – Cover is any feature that conceals wildlife or fish. Cover may be dead or live vegetation, boulders or undercut streambanks. Animals use cover to escape from predators, rest or feed.

Cover type – Cover type refers to stands of a particular vegetation type that are composed of similar species. The aspen cover type contains plants distinctly different from the subalpine fir cover type.

Crown – The crown is the top part of a tree where the leaves or needles grow.

Crown fire – A crown fire is the movement of fire through the crowns of trees or shrubs more or less independently of a surface fire. When the crown burns, the tree usually dies. (National Wildfire Coordinating Group 1996)

Cumulative effects – Cumulative effects are environmental consequences that result from the incremental impact of an action added to other past, present and reasonably foreseeable future actions, regardless of which federal or non-federal agency or person takes such action(s). Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. (40 CFR 1508.7)

Daylight thinning – Daylight thinning is a form of precommercial thinning that removes trees and brush inside a given radius around a tree.

Decommission – To decommission is to stabilize and restore unneeded roads to a more natural state (36 CFR 212.1), or to permanently remove roads and their roadbeds.

Denning habitat (lynx) – Denning habitat is the environment lynx use when giving birth and rearing kittens until they are mobile. The most common component is large amounts of coarse woody debris to provide escape and thermal cover for

kittens. Denning habitat must be within daily travel distance of winter snowshoe hare habitat – the typical maximum daily distance for females is about three to six miles. Denning habitat includes mature and *old growth* forests with plenty of coarse woody debris. It can also include young regenerating forests with piles of coarse woody debris, or areas where down trees are jack-strawed.

Designated over-the-snow routes –

Designated over-the-snow routes are routes managed under permit or agreement or by the agency, where use is encouraged, either by on-the-ground marking or by publication in brochures, recreation opportunity guides or maps (other than travel maps) or in electronic media produced or approved by the agency. The routes identified in outfitter and guide permits are designated by definition; groomed routes also are designated by definition. The determination of baseline snow compaction will be based on the miles of designated over-the-snow routes authorized, promoted or encouraged in 1998, 1999 or 2000.

Designated play areas – Designated play areas are places identified for winter recreation, such as tubing or snowmobiling, but which are not developed ski areas.

Designated route – A designated route is a road or trail that has been identified as open for specified travel use.

Developed recreation – Developed recreation requires facilities that result in concentrated use. For example, skiing requires lifts, parking lots, buildings and

roads; campgrounds require roads, picnic tables and toilet facilities.

Development, mineral – Development is the work required to prepare a mineral deposit for production. This may include driving underground workings, stripping the overburden from deposits that will be open-pit or strip mined, building waste dumps and constructing milling and transporting facilities. Oil or gas development occurs through a series of production wells.

Developmental allocations –

Developmental allocations are the allotments of federal lands made in land management plans that allow developments like campgrounds and active management like timber sales.

Direct effects – Direct effects are caused by an action and occur at the same time and place. (40 CFR 1508.8)

Dispersed recreation – Dispersed recreation is a form of outdoor recreation taking place away from the developed sites or areas that support concentrated recreational use. It may require facilities for keeping visitors safe, protecting resources and enhancing the quality of the visitor experience. (LCAS) It includes activities like hunting, backpacking and scenic driving.

Disturbance – A disturbance is any event that alters the structure, composition or function of a habitat. Natural disturbances include drought, floods, wind, wildfires, wildlife grazing, and insects and pathogens. Human-caused disturbances include timber harvest, wildland fire use, livestock grazing, road

construction and the introduction of exotic species. (LCAS)

Diurnal security habitat (lynx) – Diurnal security habitat amounts to places in lynx habitat that provide secure winter daytime bedding sites for lynx in highly disturbed landscapes like ski areas. Security habitat gives lynx the ability to retreat from human disturbance during the day, so they can emerge at dusk to hunt when most human activity stops. Forest structures that make human access difficult generally discourages human activity in security habitats. Security habitats are most effective if big enough to provide visual and acoustic insulation and to let lynx easily move away from any intrusion. They must be close to winter snowshoe hare habitat. (LCAS)

Ecological process – An ecological process is the flow and cycling of energy, materials and organisms through an ecosystem. (LCAS)

Even-aged harvest – Even-aged harvest is timber cutting that creates stands of trees essentially all the same age. Clearcuts and seed tree cuts are even-age harvests.

Exploration, mineral – Exploration is physically searching for minerals. It often includes building roads, drill pads, underground workings and trenching.

Fire behavior – Fire behavior is how fire reacts to fuel, weather and topography. (National Wildfire Coordinating Group 1996)

Fire frequency – Fire frequency is how often fire burns a given area, often termed the *fire-return interval*.

Fire regime – Fire regime is a general description of the characteristic pattern of fire: how often (frequency); how hot (intensity); and how big (scale). (Fischer and Bradley 1987; Smith and Fisher 1997; Jones and Barrett, in press)

Fire risk – The fire risk is the likelihood a fire would occur in an area based on the historic fire record data, and defined in terms of whether a stand supports crown fire.

Fire use – Fire use is the combination of wildland fire use and using prescribed fire to meet resource objectives. (National Interagency Fire Center 1996)

Firebreak – A firebreak is a natural or constructed discontinuity in potential fuels that segregates, stops, and controls the spread of fire or provides a control line from which to control the fire. (Helms 1998)

Forage – Forage is the browse and non-woody plants eaten by wildlife and livestock.

Foraging habitat (lynx) – Foraging habitat is habitat that supports lynx primary prey – snowshoe hare – and alternate prey, especially red squirrels. The highest quality snowshoe hare habitat contains a high density of young trees or shrubs that are tall enough to protrude above the snow in winter. Red squirrel densities tend to be highest in mature cone-bearing forests with substantial quantities of coarse woody debris. (LCAS)

Forb – A forb is a broadleaf plant with little or no woody material in it.

Forest highway – A forest highway is a forest road under the jurisdiction of, and maintained by, a public authority and open to public travel (USC: Title 23, Section 101(a)), designated by an agreement with the FS, state transportation agency and Federal Highway Administration.

Forest road – Any road wholly or partly within, adjacent to or serving the NF road system and which is necessary for the protection, administration and use of the NF road system and using and developing NF resources. (FSM 7705)

Forested stringer – A forested stringer is a narrow band of trees that connects to other patches of trees.

Fuel loading – Fuel loading is the amount of fuels on the forest floor, consisting of generally dead needles, twigs, branches and logs.

Fuel treatment – A fuel treatment is a management action that reduces the threat of ignition and fire intensity or rate of spread, or is used to restore fire-adapted ecosystems.

Goal – A goal is a broad description of what an agency is trying to achieve, found in a land management plan. (LCAS)

Gramminoid – Grasses and grass-like plants.

Groomed route – Groomed routes are designated over-the-snow routes on which the snow surface is packed, leveled or scarified, with or without “set tracks”, usually by equipment towed behind a snowmobile or snow-cat. Snow roads maintained by permitted snow-cat tours

are considered groomed routes. The determination of the maximum miles of groomed routes will be based on the maximum number of miles authorized, promoted or encouraged in 1998, 1999 or 2000.

Guideline – A guideline is a particular management action that should be used to meet an objective found in a land management plan. The rationale for deviations may be documented, but amending the plan is not required. (LCAS modified).

Habitat connectivity (lynx) – Habitat connectivity consists of an adequate amount of vegetative cover arranged in a way that allows lynx to move around. Narrow forested mountain ridges or shrub-steppe plateaus may serve as a link between more extensive areas of lynx habitat; wooded riparian areas may provide travel cover across open valley floors. (LCAS)

Highway – The word *highway* includes all roads that are part of the National Highway System. (23 CFR 470.107(b)).

Home range – Home range is the area used by an individual in its normal activities of foraging, mating and rearing its young, either during the entire year or seasonally. (LCAS)

HUC (Hydrologic unit code) – HUCs are a hierarchical coding system developed by the U.S. Geologic Survey to identify the geographic boundaries of watersheds of various sizes. The Columbia River is a 1st-code HUC, draining more than 165,000,000 acres. The Lower Snake River, one of the Columbia’s major tributaries, is

a 2nd-code HUC, draining more than 22,000,000 acres; the Salmon River is a 3rd code HUC, draining almost 9,000,000 acres; and the Upper Grande Ronde River is a 4th-code HUC, draining just over 1,000,000 acres.

Indirect effects – Indirect effects are caused by an action and are later in time or further removed in distance, but are still reasonably foreseeable. (40 CFR 1508.8)

Isolated mountain range – Isolated mountain ranges are small mountains cut off from other mountains and surrounded by flatlands. On the east side of the Rockies, they are used for analysis instead of sub-basins. Examples are the Little Belts in Montana and the Bighorns in Wyoming.

Ladder fuels – Ladder fuels consist of vegetation below the tree crowns, which can carry fire from the forest floor into the crowns. Ladder fuels may be low branches, shrubs and smaller trees, or dead material that hasn't fallen down to the forest floor.

Land ownership adjustments – Adjusting land ownership means NF or BLM lands are sold or exchanged, or private lands are acquired, so the landowner changes.

Landscape connectivity – see habitat connectivity

LAU (Lynx Analysis Unit) – An LAU is an area of at least the size used by an individual lynx, from about 25 to 50 mi² (LCAS). An LAU is a unit for which the effects of a project would be analyzed; its boundaries should remain constant.

Leasable minerals – Leasable minerals are federally owned fossil fuels (oil, gas, coal, shale, etc.) geothermal resources, sulfur, phosphates and uranium.

Linkage area – Linkage areas provide connectivity between blocks of lynx habitat. Linkage areas occur both within and between geographic areas, where basins, valleys or agricultural lands separate blocks of lynx habitat, or where lynx habitat naturally narrows between blocks. (LCAS updated definition approved by the Steering Committee 10/23/01).

Locatable minerals – Locatable minerals are deposits such as gold, silver, copper and other metals.

Low speed, low traffic volume road – *Low speed* is less than 20 miles per hour; *low volume* is a seasonal average daily traffic load of less than 100 vehicles per day.

Lynx habitat – Lynx habitat occurs in mesic coniferous forest that experience cold, snowy winters and provide a prey base of snowshoe hare. In the northern Rockies, lynx habitat is generally occurs between 3,500 and 8,000 feet of elevation, and primarily consists of lodgepole pine, subalpine fir and Engelmann spruce. It may consist of cedar-hemlock in extreme northern Idaho, northeastern Washington and northwestern Montana, or of Douglas fir on moist sites at higher elevations in central Idaho. It may also consist of cool, moist Douglas fir, grand fir, western larch and aspen when interspersed in subalpine forests. Dry forests do not provide lynx habitat. (LCAS)

Lynx habitat in an unsuitable condition – *Lynx habitat in unsuitable condition* consists of lynx habitat in the stand initiation structural stage where the trees are generally less than ten to 30 years old and have not grown tall enough to protrude above the snow during winter.

Stand replacing fires or certain vegetation management projects can create unsuitable conditions. Vegetation management projects that can result in unsuitable habitat include clearcuts and seed tree harvest, and sometimes shelterwood cuts and commercial thinning depending on the resulting stand composition and structure (LCAS).

Maintain – In the context of this amendment, to *maintain* means to provide enough lynx habitat to conserve lynx. It does not mean to keep the status quo.

Maintenance level – Maintenance levels define the level of service provided by and maintenance required for a road. (FSH 7709.58, Sec 12.3)

Maintenance level 1 – Maintenance level 1 is assigned to intermittent service roads when they are closed to vehicular traffic for more than one year. Such roads may be open to and suitable for non-motorized use. Basic custodial maintenance is performed to perpetuate the road and to keep the damage to adjacent resources to an acceptable level, with the emphasis on maintaining drainage facilities and runoff patterns. Planned road deterioration may occur.

Maintenance level 2 – Maintenance level 2 is assigned to roads open for

use by high-clearance vehicles, where passenger car traffic is not a consideration. Traffic is normally minor, usually consisting of administrative, permitted, dispersed recreation or other specialized uses. Log haul may occur at this level.

Maintenance level 3 – Maintenance level 3 is assigned to roads that are open to and maintained for travel by a prudent driver in a standard passenger car. User comfort and convenience are not considered priorities. Roads are typically low speed, single lane with turnouts and spot surfacing. Some roads may be fully surfaced with native or processed material.

Maintenance level 4 – Maintenance level 4 is assigned to roads that provide a moderate degree of user comfort and convenience at moderate travel speeds. Most roads are double lane and aggregate surfaced. Some may be single lane; some may be paved or have dust abated.

Maintenance level 5 – Maintenance level 5 is assigned to roads that provide a high degree of user comfort and convenience. Normally, roads are double-lane and paved, but some may be aggregate surfaced with the dust abated.

Management action – A management action is any activity undertaken as part of the administration of public lands.

Management direction – Management direction is a formal statement of goals and objectives, and the associated standards and guidelines for obtaining

them, found in a land use or other plan, law or other guiding document.

Map & field-validate – To *map* is to identify and locate certain conditions on a map. To *field-validate* is to sample on the ground a representative number of areas, using an acceptable sampling method, to make sure the mapped areas truly contain the conditions that were mapped. Not every acre has to be field-validated.

Mesic – *Mesic* describes environmental conditions with a medium supply of moisture, as opposed to *xeric* (dry) or *hydric* (wet).

Mid-seral or later – Mid-seral is the successional stage in a plant community that's the midpoint as it moves from bare ground to climax. For riparian areas, it means willows or other shrubs have become established. For shrub-steppe areas, it means shrubs associated with climax are present and increasing in density.

Mineral materials – Mineral materials are common materials such as stone, gravel, clay, cinders and decorative rock.

Mitigation – Mitigation is an action taken to avoid, minimize or repair the impact of a management activity.

Mixed-severity fire regime – A fire regime where a mix of understory and stand-replacing fires burn about every 35 to 100 years, or intermediate-intensity fires may burn, which kill fire-susceptible trees while the fire-resistant trees survive.

Multistoried – A multistoried forest is one with both an *overstory* of tall trees and a

dense undergrowth, or *understory*, of shorter trees and shrubs.

No-action alternative – The no-action alternative means taking no action to resolve the problem described in the purpose & need. It represents the most likely condition expected to exist in the future if current management practices continue unchanged.

Non-developmental allocations – Non-developmental allocations are the allotments of federal lands made in land management plans where natural disturbance processes predominate and active management, like timber sales, may not occur. Allocations generally include wilderness, roadless and semi-primitive non-motorized areas.

Objective – An objective is a statement in a land management plan describing desired resource conditions and intended to promote achieving programmatic goals. (LCAS)

Older multistoried forests – Older multistoried forests are forests in the *understory reinitiation* or *old forest*, *multistoried* structural stages

Old growth – Old growth forests generally contain trees that are large for their species and site, and are sometimes decadent with broken tops. Old growth often contains a variety of tree sizes, large snags and logs, and a developed and often patchy understory.

Old forest, multistoried structural stage – Many age classes and vegetation layers mark the old forest, multistoried stage, and it usually contains large old trees. Decaying fallen trees may also be present

that leave a discontinuous overstory canopy. On cold or moist sites without frequent fires or other disturbance, multi-layer stands with large trees in the uppermost layer develop. (Oliver and Larson, 1996)

Old forest, single-storied structural stage

Old forest, single-storied stage usually contains large old trees with little understory. Decaying fallen trees may be present, leaving a discontinuous overstory canopy. A single-layer stand evolves under the influence of frequent, recurring surface fires or other disturbance. (Oliver and Larson, 1996)

Overstory – The overstory is the upper canopy layer; the plants below comprise the *understory*.

Peer review – Peer review is the independent consideration and evaluation of a scientific article by more than one other expert in the same field of study. If the reviewers find the article to be reasonable in its descriptions of research methods, findings and conclusions, it's been *peer reviewed*. The reviewing experts must be independent of the author and should be anonymous. In a reputable scientific journal, an article will not be published until it's been peer reviewed.

Permanent development – A permanent development is any development that results in a loss of lynx habitat for at least 15 years. Ski trails, parking lots, new permanent roads, structures, campgrounds and many special use developments would be considered permanent developments.

PCT (precommercial thinning) –

Precommercial thinning is mechanically removing trees to reduce stocking and concentrate growth on the remaining trees, and not resulting in immediate financial return. (Helms 1998)

Predator – A predator is an animal that lives by preying on other animals.

Prescribed fire – A prescribed fire is any fire ignited as a management action to meet specific objectives. A written, approved prescribed fire plan must exist, and NEPA requirements met, before ignition. The term replaces *management ignited prescribed fire*. (National Wildfire Coordinating Group 1996)

Production, minerals – Producing minerals is removing the minerals from the ground, making them available for processing and consumption.

Programmatic – *Programmatic* is the broad management direction in land management plans – it provides the overall guidance for resource management programs, practices, uses and protection measures. It differs from project-level direction, which provides guidance about a certain project in a particular place.

Prospecting – Prospecting is finding an area with potential for mineral development – it takes place before *exploration*. It involves limited surface disturbance, such as geologic mapping, soil or water sampling, or collecting seismic data.

Public authority – A public authority is a federal, state, county, town or township, Indian tribe, municipal or other local

government or instrumentality thereof, with authority to finance, build, operate or maintain highway facilities. (23 CFR 460.2(b))

Public road – A public road is any road or street under the jurisdiction of and maintained by a public authority and open to public travel. (FSM 7705)

Reclamation, minerals – Reclaiming means restoring areas disturbed by mineral exploration, development and production.

Red squirrel habitat – Red squirrel habitat consists of coniferous forests of seed and cone-producing age that usually contain snags and downed woody debris, generally associated with mature or older forests.

Regeneration – Regeneration is the re-growth of trees on a disturbed or deforested site.

Regeneration harvest – Regeneration harvest is cutting trees and creating an entire new age class; an even-age harvest. The major methods are clearcutting, seed tree, shelterwood and group selective cuts. (Helms 1998)

Release – To release means to remove the competing vegetation to allow a desired species to grow, similar to weeding a garden. A tree undergoes *release* when it re-enters a period of rapid growth after competing vegetation has been removed.

Research – Research consists of studies conducted to increase scientific knowledge or technology. For the purposes of Standards VEG S5 and VEG S6, *research* applies to studies financed

from the forest research budget, and to administrative studies financed by the NF budget.

Responsible official – The responsible official is a federal employee who's been delegated the authority to make the decision about a specific planning action.

Restore, restoration – To restore is to return or re-establish ecosystems or habitats to their original structure and species composition. (Helms 1998)

Restoration tools – Restoration tools are actions such as prescribed fires or thinning used to modify an ecosystem to achieve a desired, healthy and functioning condition.

Restricted road – A restricted road is a road or segment where a certain type of use or all uses are prohibited during certain seasons of the year or yearlong.

Riparian area – A riparian area is the distinctive soil and vegetation between a stream or other body of water and the adjacent upland. It includes wetlands and the parts of the floodplains and valley bottoms that support riparian vegetation (LCAS), which typically consists of various emergent aquatic plants, as well as the grasses, sedges and shrubs that thrive close to water.

Road – A road is a motor vehicle travel way greater than 50 inches wide unless its designated and managed as a trail. A road may be classified, unclassified or temporary. (36 CFR 212.1)

Road density – Road density is the miles of road found in an area of land that's one square mile.

Road improvement – A road improvement changes a road so that its original design function is altered, its traffic-service level increases or its capacity expands. (FSM 7705) Road *maintenance* has none of these results.

Road reconstruction – Road reconstruction is improving or realigning an existing classified road. (FSM 7700)

Roads Analysis Process – Roads analysis is a scientific procedure for evaluating the ecologic, social, and economic impacts from roads and road systems. The analysis doesn't result in a decision but helps inform management decisions.

Salvage harvest – Salvage harvest is a commercial timber sale of dead, damaged or dying trees. It recovers economic value that would otherwise be lost. Collecting firewood for personal use is not considered salvage harvest.

Sapling – A sapling is a tree that's between one and five inches in diameter.

Seedling – A seedling is a tree that's less than one inch in diameter.

Semi-primitive non-motorized – A way to characterize an area with a predominately natural or natural-appearing environment, where motorized use is not permitted.

Seral – Seral is a temporary, intermediate stage in the process of succession. (Helms 1998)

Shade tolerant – Shade tolerant is a plant species that doesn't require abundant sunlight to grow, such as cedar and hemlock.

Shrub steppe habitat – Shrub steppe habitat consists of dry sites with

vegetation of intermingled shrubs and grasslands.

Site-specific – Site specific means tied to or involving a certain place. The term is applied to project analysis.

Ski area – A site and attendant facilities expressly developed to accommodate alpine or Nordic skiing. (LCAS)

Snowshoe hare habitat – Snowshoe hare habitat consists of places where young trees or shrubs grow densely, thousands of woody stems per acre.

Special use authorization – A special use authorization is a permit, easement or other written instrument that grants rights or privileges for occupying and using NF or BLM land, subject to specified terms and conditions. (FSM 2705)

Stand – A stand is a group of trees occupying a certain area that's similar in species, age and condition.

Stand composition – Stand composition is the proportion of each tree species expressed as a percentage of the total number, basal area or volume of the stand. (Helms 1998)

Stand-replacing fire regime – A stand-replacing fire regime is one where infrequent, high-intensity fires burn about every 35 to 200+ years, killing most trees and substantially changing the forest structure.

Standard – A standard is a required action in a land management plan specifying how to achieve an objective or under what circumstances to refrain from taking action. A plan must be amended to deviate from a standard.

Stand initiation structural stage – The stand initiation stage develops after a stand-replacing disturbance by fire or regeneration timber harvest. A new single-story layer of shrubs, tree seedlings and saplings establish and develop, reoccupying the site. Trees that need full sun are likely to dominate these even-aged stands. (Oliver and Larson, 1996)

Stand structure – Stand structure is the horizontal and vertical distribution of the components of a forest stand, including the height, diameter, crown layers and stems of trees, shrubs, and herbaceous understory, snags and down woody debris. (Helms 1998)

Stem exclusion structural stage – In the stem exclusion stage, trees initially grow fast and quickly occupy all of the growing space, creating a closed canopy. Because the trees are tall, little light reaches the forest floor so understory plants (including smaller trees) are shaded and grow more slowly. Species that need full sunlight usually die; shrubs and herbs may become dormant. New trees are precluded by a lack of sunlight or moisture. (Oliver and Larson, 1996)

Succession – Succession is the natural replacement, in time, of one plant community with another. Conditions in the existing plant community (or successional stage) create conditions favorable for establishing the next stage.

Successional stage – A successional stage is a normal, expected phase in the development of a plant community as it moves from bare ground to climax. The grass-forb stage precedes the woody shrub stage.

Suitable timber base – Suitable timber base are lands that have been deemed appropriate for *timber management*.

Surface fire – A surface fire spreads through surface fuels, not into the upper branches and crowns of trees.

Surface fuels – Surface fuels are needles, leaves, grass, forbs, dead and down branches and trees, stumps, shrubs and short trees.

Temporary road – A temporary road is a road not intended to be a part of the forest transportation system and not needed for long-term resource management. (36 CFR 212.1, FSM 7705)

Thermal cover – Thermal cover is cover that helps protect animals from weather. It shields them from harsh winds and precipitation and helps them conserve body heat.

Timber management – Timber management consists of growing, tending, commercially harvesting and regenerating crops of trees.

Transition zone – A transition zone is the area where the predominant species changes from one to another.

Two-aged harvests – Two-age harvests are clearcuts, seed tree cuts and shelterwood cuts that retain some overstory trees. They retain structural diversity and result in a two-aged stand when an understory of younger trees begins to grow.

Type conversion – Type conversion is changing the dominant vegetation in a place from forested to non-forested or from one species to another.

Understory – An understory consists of the trees and woody shrubs growing beneath the *overstory* in a stand of trees.

Understory fire regime – An understory fire regime is one where the understory burns frequently, from once a year to about every 35 years, with low-intensity surface fires that consume forest litter and kill small trees. Understory fires generally do not kill large, fire-resistant trees or substantially change the stand structure.

Understory re-initiation structural stage – In the understory reinitiation stage, a new age class of trees gets established after overstory trees begin to die, are removed or no longer fully occupy their growing space after tall trees abrade each other in the wind. Understory seedlings then re-grow and the trees begin to stratify into vertical layers. A low to moderately dense uneven-aged overstory develops, with some small shade-tolerant trees in the understory. (Oliver and Larson, 1996)

Understory thinning – Understory thinning, or thinning from below, removes small trees growing under taller ones, to remove ladder fuels or to improve the health and vigor of the overstory. Understory thinning may or may not provide commercial products.

Uneven-aged harvest – Uneven-age harvests remove trees with commercial value either individually or in groups. They maintain a multi-age structure by removing some trees of all sizes and by regenerating the openings. They retain structural diversity and result in a stand with several age classes. *Uneven-aged*

management creates multi-aged, multi-storied forests.

Unsuitable lynx habitat – *Unsuitable* lynx habitat consists of lynx habitat in the stand initiation structural stage where the trees are generally less than ten to 30 years old and have not grown tall enough to protrude above the snow during winter.

Stand replacing fires or certain vegetation management techniques can create unsuitable lynx habitat. Vegetation management projects that can result in unsuitable habitat include clearcuts and seed tree harvest, and sometimes shelterwood cuts and commercial thinning depending on the resulting stand composition and structure (LCAS).

Unsuitable lands – Unsuitable lands have been classified as inappropriate to manage for a particular resource use. For the FS, *unsuitable lands* are those not managed for timber production for reasons of policy, ecology, technology, silviculture or economics.

Valid existing rights – Valid existing rights are a definable legal interest established or existing through statute, real estate transactions, federal grants and leases.

Vegetation management projects – Vegetation management consists of timber and fire management projects that change the composition and structure of vegetation to meet specific objectives, by means of prescribed fire, timber harvest, precommercial thinning, etc. For the purposes of this amendment, the term does not include removing vegetation for permanent developments like mineral

operations, ski runs, roads and the like, and does not apply to fire suppression or wildland fire use.

Watershed – A watershed is the entire region drained by a waterway or into a lake or reservoir. Above a point on a stream, it's the area contributing water to the stream.

Wildland fire – A wildland fire is any fire burning in the wildlands that's not a prescribed fire or a structural fire. This term encompasses fires previously called *wildfires*. (National Interagency Fire Center 1998)

Wildland fire use – Wildland fire use is managing naturally ignited wildland fires to accomplish resource management objectives in areas that have a fire management plan. This term replaces *prescribed natural fire*. (Wildland and Prescribed Fire Management Policy, August 1998)

Willow carr – A willow carr consists of willows growing on permanently wet, organic soil.

Winter snowshoe hare habitat – Winter snowshoe hare habitat consists of places where young trees or shrubs grow dense – thousands of woody stems per acre – and tall enough to protrude above the snow

during winter, so hares can browse on the bark and small twigs (Ruediger et al. 2000). Winter snowshoe hare habitat develops primarily in the stand initiation, understory reinitiation and old forest multistoried structural stages.

WUI (Wildland urban interface) – The WUI is the line, area or zone where structures and other human developments meet or intermingle with undeveloped wildland or vegetative fuels. (National Interagency Fire Center 1996) For this analysis the WUI was defined as the zone within a mile of where people live, liberally measured as just one structure per ten square miles.

Young regenerating forest – A young regenerating forest is a forest in the *stand initiation* structural stage

Young forest multistoried structural stage – In the young forest, multistoried stage, three or more layers of trees become established because of minor disturbances that cause some mortality in the overstory, perpetuating a multi-layer, multi-aged stand structure. A broken overstory layer with a mix of tree sizes characterizes this stage. Large trees are scarce. This stage likely has shade tolerant trees in the understory. (Oliver and Larson, 1996)

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List of acronyms

| <u>Acronym</u> | <u>Title</u> | <u>What it is</u> |
|----------------|--|---|
| AIRFA | American Indian Religious Freedom Act | Law |
| BA | Biological assessment | Document |
| BBER | Bureau of Business & Economic Research | Subset of Economics Department at University of Montana |
| BLM | Bureau of Land Management | USDI agency |
| BO | Biological opinion | Document |
| CEQ | Council on Environmental Quality | Federal department |
| CFR | Code of Federal Regulations | Set of regulations |
| DEIS | Draft environmental impact statement | Document |
| DNA | Di-nuclyorubonucleic acid | Genetic material |
| DNRC | Department of Natural Resources and Conservation | State department |
| EIS | Environmental impact statement | Document |
| ESA | Endangered Species Act | Law |
| FIA | Forest inventory and analysis | Vegetation data |
| FLPMA | Federal Land Policy Management Act | Law |
| FS | Forest Service | USDA agency |
| FSH | Forest Service Handbook | Set of procedures |
| FSM | Forest Service Manual | Set of policies |
| FWS | U.S. Fish and Wildlife Service | USDI agency |
| GIS | Geographic information system | Mapping tool |
| HCP | Habitat conservation plan | Document |
| HUC | Hydrologic unit code | Watershed descriptor |
| ID | Interdisciplinary "team" | Group of people |
| IMI | Inventory and Monitoring Institute | Administrative subset of FS |
| IMPLAN | Impact Analysis for Planning | Computer program |
| INFISH | Inland Native Fish Strategy | Document |
| LAU | Lynx analysis unit | Lynx habitat descriptor |
| LCAS | Lynx Conservation Assessment and Strategy | Document |
| MIS | Management indicator species | Plant or animal |
| MOU | Memorandum of understanding | Agreement |
| NEPA | National Environmental Policy Act | Law |
| NHPA | National Historic Preservation Act | Law |
| NF | National Forest | Administrative unit |
| NFMA | National Forest Management Act | Law |
| NIFC | National Interagency Fire Center | Administrative subset of FS & BLM |

Acronyms

| <u>Acronym</u> | <u>Title</u> | <u>What it is</u> |
|----------------|--|------------------------------|
| NRHP | National Register of Historic Places | |
| NWCG | National Wildfire Coordinating Group | Administrative working group |
| OHV | Off Highway Vehicle amendment | Document |
| PACFISH | Interim Strategy for Managing Anadromous Fish-producing Watersheds in Eastern Oregon and Washington, Idaho, and Portions of California | Document |
| TES | Threatened, endangered, sensitive – also TEPS threatened, endangered, proposed and sensitive | Plant or animal |
| TPA | Tree per acre | Unit of measure |
| TSMRS | Timber stand management record system | Data base |
| USDA | United States Department of Agriculture | Federal department |
| USDC | United States Department of Commerce | Federal department |
| USDI | United States Department of Interior | Federal department |
| USDL | United States Department of Labor | Federal department |
| WUI | Wildland urban interface | Area of land |
